



**California Environmental Protection Agency  
Department of Toxic Substances Control**

**HAZARDOUS WASTE FACILITY PERMIT**

Facility Name: The Dow Chemical Company  
P.O. Box 1398  
901 Loveridge Road  
Pittsburg, CA 94565-1398

Owner Name: The Dow Chemical Company  
P.O. Box 1398  
901 Loveridge Road  
Pittsburg, CA 94565-1398

Operator Name: The Dow Chemical Company  
P.O. Box 1398  
901 Loveridge Road  
Pittsburg, CA 94565-1398

Permit Number: 06-BRK-02

Facility EPA ID Number: CAD 076528678

Effective Date: July 31, 2006

Expiration Date: July 30, 2016

Pursuant to Section 25200 of the California Health and Safety Code, this RCRA-equivalent Hazardous Waste Facility Permit is hereby issued to The Dow Chemical Company. The issuance of this Permit is subject to the conditions set forth in Attachment A and the Part "B" Permit Application (Operation Plan). The permit consists of a total of 19 pages including the cover page and Attachment "A".

Mohinder S. Sandhu, P.E., Chief  
Standardized Permitting and Corrective Action  
Branch  
Department of Toxic Substances Control

Date \_\_\_\_\_

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## **ATTACHMENT A**

### **HAZARDOUS WASTE FACILITY PERMIT**

The Dow Chemical Company,  
901 Loveridge Road  
Pittsburg, CA 94565-1398  
EPA ID No. CAD 076528678

#### **Part I. DEFINITIONS**

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, Division 20, Chapter 6.5, and California Code of Regulations Title 22, Division 4.5, unless expressly provided otherwise by this Permit.

1. "DTSC" as used in this Permit means the California Department of Toxic Substances Control.
2. "Permittee" as used in this Permit means the Owner and Operator.
3. "HSC" as used in this Permit means the Health and Safety Code.
4. "Cal. Code of Regs." as used in this Permit means the California Code of Regulations.
5. Unless explicitly stated otherwise, all references to items in this Permit shall refer only to items occurring within the same part.

## Part II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. Owner:

The facility owner is The Dow Chemical Company, a corporation headquartered in Midland, Michigan.

2. Operator:

The facility operator is The Dow Chemical Company.

3. Location:

The facility is located at 901 Loveridge Road in the City of Pittsburg, California on 513 acres of land (latitude 38° 01' 15", longitude 121° 51' 51"). Refer to Figure 1 which shows the general location of the Dow Chemical company facility in the City of Pittsburg, California. Dow purchased the property in 1938. The site is located within the city limits of Pittsburg.

4. Description:

The Dow Chemical Co., Pittsburg facility currently operates 24 hours a day, seven days a week. Operations include research and development and the manufacture of products for agricultural operations, pest control services, paper manufacturers, carpet mills, and biocides. During the manufacture of chemical products at the facility, hazardous wastes are also produced as by products and are categorized as the following: chlorinated pyridines; waste styrene oil; solvent and paint contaminated filters; chlorinated organics; organic liquid lab wastes; caustic scrubber effluent; distillation liquids; sym-tet liquid organics; chlorinated liquid solvents; and spent solvents. These Hazardous wastes are then placed in drums and stored in accumulation areas. These wastes are normally shipped offsite within 90 days. However if additional storage time is required these waste drums are moved to the Block 560 Drum Storage Area. The wastes are transported offsite to be processed or disposed of at authorized facilities.

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5. Facility Size and Type for Fee Purposes:

The facility is categorized as a medium size storage facility for purposes of HSC, Section 25205.19 for annual facility fees.

### **Part III. GENERAL CONDITIONS**

#### **1. Permit Application Documents**

- (a) The Part "A" Application and the Part "B" Application (Operation Plan) dated January 16, 2006, for the Block 560 Drum Storage Area, are hereby made a part of this Permit by reference.

#### **2. Effect of Permit**

- (a) The Permittee shall comply with the provisions of the California Health and Safety Code (CHS), and Division 4.5 of the California Code of Regulations (Cal. Code of Regs.), title 22. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies including but not limited to the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.
- (b) The Permittee is authorized to store hazardous wastes in accordance with the conditions of this Permit. Any or storage of hazardous waste not specifically authorized in this Permit is strictly prohibited.
- (c) Compliance with the terms of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.
- (d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.
- (e) Failure to comply with any terms or conditions set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to HSC Section 25187.

- (f) In addition, failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is ground for revocation of this Permit (Cal. Code of Regs., title 22, section 66270.43).
- (g) In case of conflicts between the Operation Plan and the Permit, the Permit condition takes precedence.
- (h) The Permit includes and incorporates by reference any conditions of waste discharge requirements issued by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any other conditions imposed pursuant to section 13227 of the Water Code.

3. Compliance with California Environmental Quality Act (CEQA)

DTSC has prepared a Negative Declaration, in accordance with the requirements of Public Resources Code section 21000 et seq. and the CEQA Guidelines, section 15070 et seq. of title 14, California Code of Regulations.

4. Waste Minimization Certification

Pursuant to Health and Safety Code Section 25202.9 the Permittee shall certify annually, by March 1 for the previous year ending December 31, that:

- (a) The Facility has a program in place to reduce the volume and toxicity of all hazardous wastes listed in Table 1 which are generated by the Facility operations to the degree, determined by the Permittee, to be economically practicable.
- (b) The method of storage, treatment, or disposal is the only practicable method or combination of methods currently available to the Facility which minimizes the present and future threat to human health and the environment.
- (c) The Permittee shall make this certification, in accordance with Cal. Code of Regs., title 22, section 66270.11. The Permittee shall submit three copies of the certification to: Branch Chief, Standardized Permitting and Corrective Action Branch, 700 Heinz Avenue, Berkeley, CA 94710 and shall record and maintain such certification in the facility Operating Record.

5. Waste Minimization Conditions

- (a) The Permittee shall comply with the Hazardous Waste Source Reduction and Management Review Act (SB 14) requirements that are specified in the Health and Safety Code sections 25244.19, 25244.20 and 25244.21, and any subsequent applicable statutes or regulations promulgated thereunder. This would include submittal of SB 14 documents to DTSC upon request.
- (b) DTSC may require the Permittee to submit a more detailed status report explaining any deviation from, or changes to, the approved waste minimization plan.

#### Part IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes operation only of the hazardous waste unit and activities listed below. The Permittee shall not treat or store hazardous waste in any units other than those specified in this Part IV. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in the California Code of Regulations, title 22, sections 66270.40-66270.42.

##### Unit Name

Block 560 Drum Storage Area

##### Location

The Block 560 Drum Storage Area is located in the 560 block of the Facility between 4<sup>th</sup> Street and 5<sup>th</sup> Street and between F Street and G Street. It is located about 760 feet from the property line. Figure 3 of the Appendices shows the location of the Block 560 Storage Area within the Facility.

##### Activity Type

The Block 560 Drum Storage Area will store either: 25, 55, and 80 gallon sized drums of hazardous waste. The maximum total permitted capacity is 6000 gallons. Storage is authorized for a period of no longer than 1 year. The types of hazardous wastes that can be stored are listed in Table 1 "Hazardous Waste Stream Descriptions"

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##### Physical Description

The Block 560 Drum Storage Area consists of two uncovered bays. Each bay has secondary containment consisting of an epoxy coated concrete pad and berms. Each bay is 40 feet long by 20.4 feet wide with six inch high berms. Both sections have ramps to allow forklifts to safely enter. Each bay contains its own 16 cubic foot sump where rain water is accumulated. Accumulated rain water is pumped out of these sumps and used in various processes at the Dow facility. Figure 4 is a photograph of both units.

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##### Maximum Capacity

The maximum permitted storage capacity is 6000 gallons. The maximum permitted storage capacity can be made of any combination of 25, 55, or 80 gallon size drums. The largest allowable drum size shall be 80 gallons. Incompatible chemicals shall be stored in separate bays. Containers shall not be stacked more than one high.

**Table 1**  
**HAZARDOUS WASTE STREAM DESCRIPTIONS**

| Name and description of Hazardous waste  | Hazardous Constituents  | RCRA Waste Code  | CA Waste Code            | Compatibility Code * | Annual Quantity (tons) | Composition   |
|--|---|--|--------------------------|----------------------|------------------------|---|
| Chlorinated Pyridines liquid and solid. Source description:<br>- sample drains<br>- Equipment drains<br>- maintenance preparation<br>- other | Chlor-pyridines,<br>Arsenic<br>Barium<br>Cadmium<br>Chromium<br>Lead<br>Mercury<br>Selenium<br>CCl <sub>4</sub><br>HCB<br>HCBd<br>HCE<br>C <sub>2</sub> Cl <sub>4</sub> | D004<br>D005<br>D006<br>D007<br>D008<br>D009<br>D010<br>D019<br>D032<br>D033<br>D034<br>D039 | 741<br>751               | 1                    | 150                    | Chl. Pyridines 40-100%<br>Absorbent debris 0-50%<br>Hexachloroethane 0-2.0%<br>Hexachlorobenzene 0-2.0%<br>Carbon Tetrachloride 0-4.0%<br>Metals 0-2.0% |
| Trench Solids  | CCl <sub>4</sub><br>HCB<br>HCBd<br>HCE<br>C <sub>2</sub> Cl <sub>4</sub><br>TCE   | D019<br>D032<br>D033<br>D034<br>D039<br>D040   | 751<br>352               | 1                    | 10                     | Dirt 0-25%<br>Debris 0-20%<br>Absorbent 0-40%<br>Chlorinated Solvents 0-15%   |
| Waste Styrene liquid and solids  | Styrene Ethyl Benz. 1,3 BD  | D001   | 271                      | 1                    | 105                    | Stryene 0-98%<br>Ethylbenzene 0-1%<br>1,3-Butadiene 0-1%<br>Absorbent 0-50%   |
| Paint waste from maintenance activities, liquids and solids  | MEK<br>MECl <sub>2</sub>  | D001<br>D035<br>F005<br>F002   | 212                      | 1                    | 3                      | Methyl Ethyl Ketones 60-80%<br>Methylene Chloride 5-10%<br>Paint Solids 15-30%<br>Absorbent 0-50%   |
| Discarded Chlorinated Products from Miscellaneous sources, liquid and solids   | MECl <sub>2</sub><br>1,3-DCP<br>C <sub>2</sub> Cl <sub>4</sub><br>CCl <sub>4</sub><br>111-TCA<br>TCE  | U080<br>U084<br>U210<br>U211<br>U226<br>U228   | 211                      | 1                    | 10                     | Chlorinated Solvents 50-100%<br>Absorbents 0-50%  |
| Latex Waste, liquid and solids   | Acrylic Acid  | U008   | 352<br>181<br>343<br>331 | 1                    | 20                     | Acrylic Acid 0-100%<br>Inorganic Solid Waste 0-50%<br>Organic solids 0-50%<br>Organic liquid mixtures 0-100%<br>Absorbent 0-50%                         |

\* Compatibility Code description available in Operations Plan section C

**Table 1 (Cont'd)**

| Name and description of Hazardous waste               | Hazardous Constituents   | RCRA Waste Code  | CA Waste Code     | Compatibility Code | Annual Quantity (tons) | Composition   |
|---|--|--|-------------------|--------------------|------------------------|---|
| Organic Lab Waste and Debris, liquid and solids       | Acetone<br>MeCl <sub>2</sub><br>Acetonitrile<br>Hexane<br>MeOH<br>Styrene<br>CCl <sub>4</sub><br>C <sub>2</sub> Cl <sub>4</sub><br>HCB<br>HCE<br>Glycols<br>Chloro-pyridines | D001<br>F002<br><br><br>F003<br><br>D019<br>D039<br>D032<br>D034     | 551<br>751<br>741 | 1                  | 17                     | Acetone 0-5%<br>Acetonitrile 0-1%<br>Hexane 0-2%<br>Styrene 0-2%<br>Chlorinated Solvents 40-60%<br>Glycols 0-15%<br>Chlorinated Pyridines 0-15%<br>Debris 0-10% |
| Corrosive Lab Waste, basic, liquid                    | KOH<br>NaOH<br>NH <sub>4</sub> OH  | D002   | 551               | 2                  | 15                     | Potassium Hydroxide 0-5%<br>Sodium Hydroxide 0-15%<br>Ammonium Hydroxide 5-10%<br>Water 40-70%  |
| Corrosive Lab Waste, Acid, liquid                     | HCl<br>H <sub>2</sub> SO <sub>4</sub>  | D002   | 551               | 3                  | 15                     | Hydrochloric Acid 5-10%<br>Sulfuric Acid 5-10%<br>Water 80-90%  |
| Chlorinated organics/solvents, liquids and solids     | MeCl <sub>2</sub><br>1,3-DCP<br>C <sub>2</sub> Cl <sub>4</sub><br>CCl <sub>4</sub><br>ChCl <sub>3</sub><br>1,2-DCE<br>HCB<br>HCBUT<br>HCE<br>TCE<br>Chloro-pyridines         | F002<br>D039<br>D019<br>D022<br>D028<br>D032<br>D033<br>D034<br>D040 | 741<br>751        | 1                  | 170                    | Chlorinated Solvents 50-100%<br>Chlorinated pyridines 0-20%<br>Absorbent 0-30%  |
| Chlorinated / Fluorinated pyridines liquid and solids | Chloro-Fluoro pyridines  | NA   | 741<br>751        | 1                  | 910                    | Chlorofluoro pyridines 0-100%<br>Absorbent 0-50%  |
| Waste Dowtherm liquid and solids                      | Byphenyl-Phenyl Ethers<br>Diphenyl Oxide<br>Diphenyl Phenols   | NA   | 352<br>351        | 1                  | 5                      | Biphenyl Phenyl Ethers 40-60%<br>Diphenyl Oxide 30-50%<br>Diphenyl Phenols 0-10%<br>Absorbent 0-50%   |
| Halopyridines, liquid and solids                      | Chloro-Fluoro pyridines<br>HF  | NA   | 741               | 4                  | 10                     | Chlorofluoro pyridines 50-100%<br>Hydrogen Fluoride 0-10%<br>Absorbent 0-40%  |

\* Compatibility Code description available in Operations Plan section C

**Table 1 (Cont'd)**

| Name and description of Hazardous waste        | Hazardous Constituents   | RCRA Waste Code  | CA Waste Code                   | Compatibility Code | Annual Quantity (tons) | Composition  |
|--|--|--|---------------------------------|--------------------|------------------------|--|
| Spent Carbon, solids                           | CCl <sub>4</sub><br>ChCl <sub>3</sub><br>MeCl <sub>2</sub><br>TCE<br>Flouride<br>Chlorine  | D019<br>D022<br>F002<br>D040   | 211<br>751<br>352<br>351<br>181 | 1                  | 35                     | Chlorinated Solvents 5-10%<br>Carbon 80-90%<br>Fluoride 0-2.5%<br>Chlorine 0-2.5%  |
| Distillation Liquids                           | Arsenic<br>Cadmium<br>Chromium<br>Lead<br>Mercury<br>Selenium<br>CCl <sub>4</sub><br>CHCl <sub>3</sub><br>HCB<br>HCBUT<br>HCE<br>C <sub>2</sub> Cl <sub>4</sub><br>TCE | D004<br>D006<br>D007<br>D008<br>D009<br>D010<br>D019<br>D022<br>D032<br>D033<br>D034<br>D039<br>D040 | 741                             | 1                  | 750                    | Metals 0-5%<br>Chlorinated Solvents 95-100%  |
| Contaminated Clothing, Filter bags and Debris  | CCl <sub>4</sub><br>HCB<br>HCE<br>C <sub>2</sub> Cl <sub>4</sub><br>MeCl <sub>2</sub><br>TCE<br>Chlor-pyridines  | D019<br>D032<br>D034<br>D039<br>F002<br>D040   | 551<br>751<br>352<br>512        | 1                  | 80                     | Contaminated Clothing 60-80%<br>Filter bags 0-5%<br>Debris 0-5%<br>Chlorinated Solvents 0-5%<br>Chlorinated Pyridines 0-5% |
| Contaminated Oil and Debris, liquid and solids | C <sub>2</sub> Cl <sub>4</sub><br>MeCl <sub>2</sub>  | D039<br>F002   | 221<br>352<br>351               | 1                  | 10                     | Contaminated Oil 50-100%<br>Debris 0-50%<br>Absorbent 0-49%<br>Chlorinated Solvents 0-1%                                   |
| Asbestos containing waste, solids              | Asbestos   | NA   | 181                             | 1                  | 5                      | Asbestos 100%  |
| Paint chips contaminated with Chromium, Solids | Chromium   | D007   | 352                             | 1                  | 3                      | Sandblast Sand 70-80%<br>Paint Chips 10-20%<br>Debris 9-18%<br>Metals 1-2%   |
| Contaminated Brick, solids                     | MeCl <sub>2</sub>  | F002   | 181                             | 1                  | 20                     | Contaminated Brick 80-100%<br>Debris 0-15%<br>Methylene Chloride 0-5%  |

\* Compatibility Code description available in Operations Plan section C

### RCRA Hazardous Waste Codes

Refer to Table 1, Hazardous Waste Stream Descriptions.

### California Hazardous Waste Codes

Refer to Table 1, Hazardous Waste Stream Descriptions.

### Air Emission Standards for Containers

- Containers with a capacity less than 0.1 cubic meters (26 Gallons) that are stored in the Block 560 Drum Storage Area are exempt from air emissions standards for Container Level 1 controls as specified in Cal. Code Regs., title 22, Section 66264.1080(b).
- Containers stored at the Block 560 Drum Storage Area with a capacity greater than 0.1 cubic meters (26 gallons) and less than 0.46 cubic meters (118 gallons) are subject Containers Level 1 standards specified in Cal. Code Regs., title 22, section 66264.1086(c). Dow will use DOT-compliant containers. These containers will be equipped with covers and closure devices, as applicable to the container, that are composed of suitable materials to minimize exposure of the hazardous waste to the atmosphere and to maintain the equipment integrity, for as long as the container is in service.

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**Part V. SPECIAL CONDITIONS WHICH APPLY TO ALL OF THE FACILITY'S  
STORAGE AND/OR TREATMENT UNITS**

1. The Permittee is not allowed to receive hazardous wastes from off-site.
2. All hazardous wastes stored under the jurisdiction of this Permit shall be stored in approved containers in accordance with the conditions of this Permit.
3. Subject to California Code of Regulations, compliance with this Permit generally constitutes compliance in regard to the permitted facility, for purposes of enforcement, with the California Health and Safety Code.
4. The Permittee shall repair the cracks in the top of the berms of the secondary containment within 60 days of the issuance of this permit in order to prevent further deterioration of the berms. In addition the permittee shall submit an updated certified report reflecting the restoration of the berm within 30 days of the completed work.
5. The Permittee shall recertify the integrity of the secondary containment coating every two years from the effective date of this permit. The recertification report shall be submitted to DTSC by January 31<sup>st</sup> of every even numbered year. First recertification report shall be submitted on January 31, 2008.

## **Part VI. CORRECTIVE ACTION**

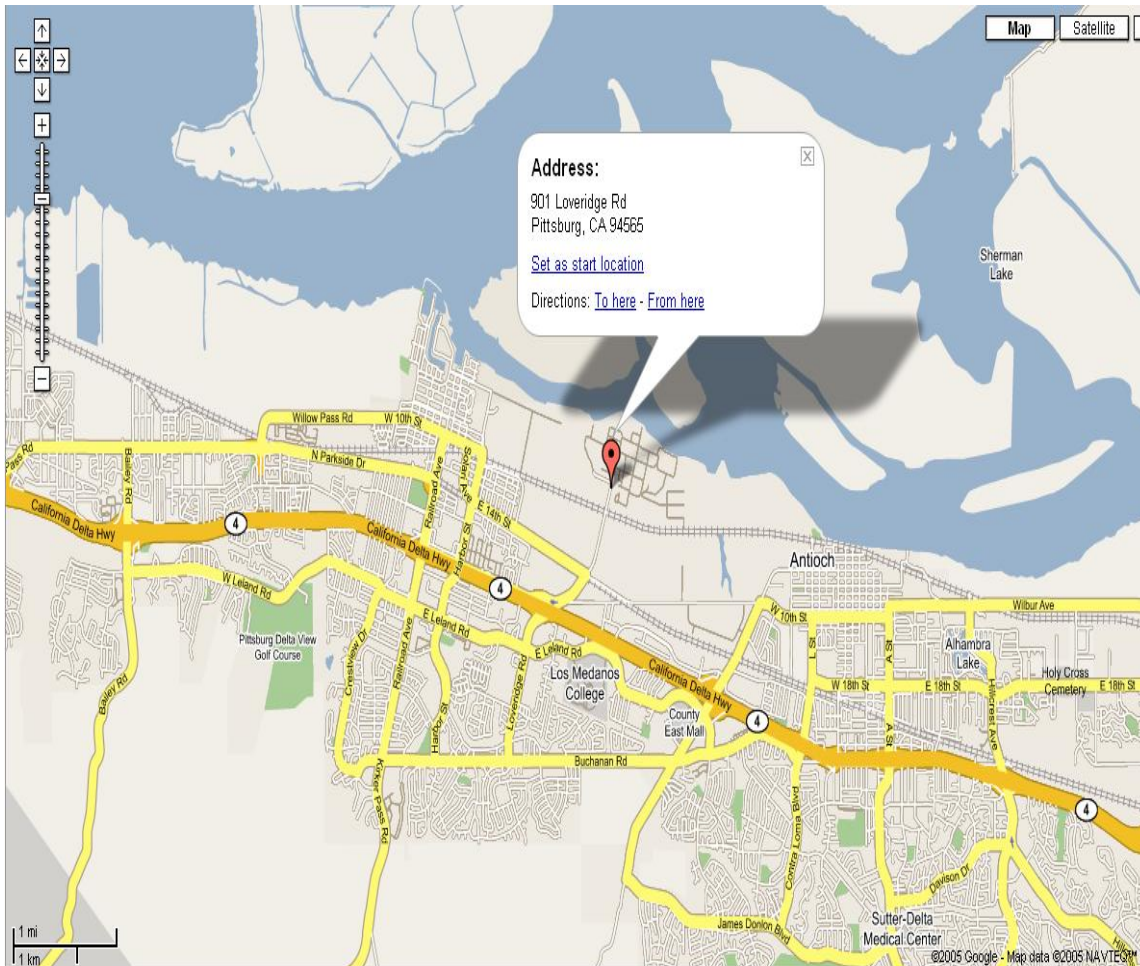
1. Refer to the Hazardous Waste Facility Permit Boiler and Industrial Furnace (BIF) Permit Part VI, effective on April 28, 2003, regarding corrective action of historical releases at the Dow Chemical Company.
2. In the event the Permittee identifies an immediate or potential threat to human health and/or the environment, discovers new releases of hazardous waste and/or hazardous constituents, or discovers new Solid Waste Management Units (SWMUs) not previously identified, the Permittee shall notify DTSC orally within 24 hours of discovery and notify DTSC in writing within 10 days of such discovery summarizing the findings including the immediacy and magnitude of any potential threat to human health and/or the environment.
3. DTSC may require the Permittee to investigate, mitigate and/or take other applicable action to address any immediate or potential threats to human health and/or the environment and newly identified releases of hazardous waste and/or hazardous constituents. For newly identified SWMU's the Permittee is required to conduct corrective action. Corrective action will be carried out either under a Corrective Action Consent Agreement or Unilateral Corrective Action Order pursuant to Health and Safety Code, section 25187.

## **APPENDICES**



**Figure 1**

**Aerial Overview Photo of Dow Chemical Pittsburg**





## Dow Chemical Co. – Plot Plan Map of Entire Manufacturing Operations



**Figure 4**

**Photos of Block 560 Drum Storage Area looking Northward.**

**Note: 6" berm around perimeter of each bay and low point sump in south east corner for collection of runoff water.**